

Amey
#3/10
2/18/98

IN THE CLAIMS

Please add the following new claims:

Small
B
--57. Gas microbubbles comprising an amphiphilic surfactant capable of forming gas-containing microbubbles, the microbubbles containing a biocompatible halogenated gas or air are bounded by a gas/liquid interface which comprises as the amphiphilic surfactant at least one saturated phospholipid in lamellar or laminar form.

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58. The gas microbubbles as claimed in claim 57, wherein said ~~halogenated~~ *fluorine-containing* gas is a freon.

59. The gas microbubbles as claimed in claim 58, wherein said freon is a perfluorinated hydrocarbon.

60. The gas microbubbles as claimed in claim 57, wherein said phospholipid has hydrophilic groups selected from the group consisting of choline, ethanolamine, serine, glycerol, pentoses and hexoses.

61. The gas microbubbles as claimed in claim 57, wherein said surfactant comprises a lecithin or derivative thereof.

62. An aqueous dispersion comprising gas microbubbles as claimed in claim 57.

63. An aqueous dispersion comprising gas microbubbles as claimed in claim 58.

64. An aqueous dispersion comprising gas microbubbles as claimed in claim 59.

65. An aqueous dispersion comprising gas microbubbles as claimed in claim 60.

66. The gas microbubbles as claimed in claim 57 which comprise a biocompatible ^{fluorine-containing} ~~halogenated~~ gas stabilized by monolayers of amphiphilic surfactant.

67. The gas microbubbles as claimed in claim 66, wherein said ^{fluorine-containing} ~~halogenated~~ gas is a freon.

68. The gas microbubbles as claimed in claim 63, wherein said freon is a perfluorinated hydrocarbon.

69. The gas microbubbles as claimed in claim 57 having an average size of 0.1-10 μm .

70. A process for preparation of a contrast agent which comprises generating gas microbubbles comprising amphiphilic phospholipid material capable of formation of gas-containing vesicles, said microbubbles containing a biocompatible ^{fluorine-containing} ~~halogenated~~ gas.

cont B 71. A process as claimed in claim 70 which comprises shaking or sonicating an amphiphile-containing mixture comprising a phospholipid in the presence of a halogenated gas to generate a liquid dispersion of said gas microbubbles.

Sub C 72. A process as claimed in claim 71, wherein an aqueous amphiphile-containing mixture comprising a ~~saturated~~ phospholipid is used to generate an aqueous dispersion of air or gas microbubbles.

73. A process as claimed in claim 71, wherein the contrast agent is isolated by freeze drying.

74. A process as claimed in claim 70, wherein said hydrocarbon is perfluorinated.

75. A contrast agent prepared by the process of claim 70.

76. A method of enhancing ultrasound images of a vascular system comprising administering to said system a diagnostic ultrasound contrast agent according to claim 75.

cont
B'
77. Microbubbles comprising an amphiphilic phospholipid material capable of formation of gas-containing microbubbles, said microbubbles comprising a physiologically acceptable halogenated gas or

a process of preparing a contrast agent comprising generating said bubbles.

78. Microbubbles comprising an amphiphilic phospholipid material capable of formation of gas-containing microbubbles, said microbubbles comprising a fluorine-containing gas or

a process of preparing a contrast agent comprising generating said bubbles.

79. Microbubbles comprising an amphiphilic phospholipid material capable of formation of gas-containing microbubbles, said microbubbles comprising a fluorine-containing freon or

a process of preparing a contrast agent comprising generating said bubbles.